Date: Fri, 12 Feb 93 04:30:03 PST
From: Packet-Radio Mailing List and Newsgroup <packet-radio@ucsd.edu>
Errors-To: Packet-Radio-Errors@UCSD.Edu
Reply-To: Packet-Radio@UCSD.Edu
Precedence: Bulk
Subject: Packet-Radio Digest V93 #38
To: packet-radio

Packet-Radio Digest Fri, 12 Feb 93 Volume 93 : Issue 38

Today's Topics:

advice on backbones wanted (4 msgs)
Alinco DJ-580t & packet
Ami-Pac? Amiga Packet Program? (2 msgs)
hs-modem mailing list: where ?
JNOS (NOS) and the LAN (3 msgs)
LATEST HF PACKET MODE INFO NEEDED? USERS ? URGENT ?
MOCOM 70 modification experience (2 msgs)
NOSintro - TCP/IP over Packet Radio
Setting up packet links with hams in Cuba . (2 msgs)

Send Replies or notes for publication to: <Packet-Radio@UCSD.Edu>
Send subscription requests to: <Packet-Radio-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Packet-Radio Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/packet-radio".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 9 Feb 1993 19:19:37 GMT
From: dog.ee.lbl.gov!hellgate.utah.edu!fcom.cc.utah.edu!civil.utah.edu!match@network.UCSD.EDU
Subject: advice on backbones wanted
To: packet-radio@ucsd.edu

We (the ham radio community at large) are making plans to upgrade (build?) the backbone thru Utah, North-to South as well as East-to West. As you may know, 80% of the traffic enters and leaves Utah via telephone modem!

The major players, Utah Amateur Radio Club (of which I'm the packet chairman), Utah Packet Radio Association, and a loosely organized TCP/IP group are all willing to combine resources to this end.

The talk has been leaning toward running ax.25 at 9600 baud on 70cm. Seems to me that I've read on this newsgroup that in other parts of the country people are upgrading thier 9600 baud backbones with 56k or 112k baud systems.

A small minority of users here (myself included) feel that the backbone should be faster than 9600 baud. Maybe 56k or 110-112k full-duplex in one of the microwave bands, 33cm, 23cm or 13cm, with slower 9600 or even 1200 baud gateways with routers along the path, in each of the major metropolitan areas.

We'll have to buy or build most of the equipment anyway, so it makes no sense to me to put up a system that will be overloaded in a few months.

If you have any experience with the backbone in your area, or if you have any input at all please respond. I'd like to know what you are doing.

If you were "Master of the Universe" and had unlimited money, and access to all the best mountain peaks in Utah, how would you do it?

Marvin Match KA7TPH
match@sky.civil.utah.edu

Date: Tue, 9 Feb 1993 21:19:06 GMT
From: pa.dec.com!engage.pko.dec.com!e2big.mko.dec.com!zko.dec.com!
coolidge@decwrl.dec.com
Subject: advice on backbones wanted
To: packet-radio@ucsd.edu

--

I'd be interested in hearing advice, experiences, and ideas on this, too, as I'm contemplating setting up some sort of high speed UHF router/gateway service to link "local" backbones in central and northern New England. I don't live on a mountain, but on top of a 1000' hill with pretty good views.

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-------------------------------------------------------------------------------
Bayard R. Coolidge N1HO      DISCLAIMER: The opinions expressed are
Digital Equipment Corp.      solely those of the author, and not
Nashua, New Hampshire, USA   those of Digital Equipment Corporation
coolidge@zko.dec.com         nor any other entity.
"Brake for Moose - It can save your life" - N.H. Fish & Game Dept.
-------------------------------------------------------------------------------
```

Date: 11 Feb 1993 06:08:55 GMT

From: news.service.uci.edu!ucivax!news.claremont.edu!nntp-server.caltech.edu!
pjb@network.UCSD.EDU
Subject: advice on backbones wanted
To: packet-radio@ucsd.edu

The network in Utah actually works pretty well when noone is on it.

Starting from Los Angeles, one can easily connect to High Potosi Pk. near Las Vegas, then over to Cedar City , nodes MLF, and SNOW, and then out into idaho. Alternatively, going out towards colorado or new mexico also seems workable with the current networks.

If you are out in the sticks and getting frequencies is not a problem, I would definitely recommend separate user access and trunking frequencies.

"trunking" or node to node communications would optimally be full duplex and set up so that each pair of sites is on a separate radio frequency, the higher the baud rate the better.

A BIG mistake I saw in the southeast united states was that everyone put their packet node on the same channel. Thus while there were a line of hilltops from southern indiana to georgia, service was unreliable because of all the collisions.

If you minimize collisions you will have a really good system. This can be done on the user channels by using a regular repeater (possibly adding the TAPR bit regenerator to optimize it for data). By using a true "voice-style" repeater everyone can hear everyone else, and there should never be collisions. If you plan the node-to-node trunking appropriately, you should have little trouble with collisions.

Good Luck de Paul KI6CQ

pjb@hss.caltech.edu

Date: Wed, 10 Feb 1993 16:04:16 GMT
From: elroy.jpl.nasa.gov!sdd.hp.com!col.hp.com!news.dtc.hp.com!srgenprp!
glenne@ames.arpa
Subject: advice on backbones wanted
To: packet-radio@ucsd.edu

Marvin Match (match@civil.utah.edu) wrote:

: If you have any experience with the backbone in your area, or if you have

: any input at all please respond. I'd like to know what you are doing.

: If you were "Master of the Universe" and had unlimited money, and access
: to all the best mountain peaks in Utah, how would you do it?

Marvin

I'll try to avoid spurious answers to your last question (:>)

This (networking, not Utah peaks specifically) is part of the more general problem a few of us have been working on for some time. If you are interested in some of our thoughts and efforts and haven't already seen them, you might want to look at the 8th,9th and 10th ARRL Computer Networking Conference proceedings.

A significant portion of our evolving implementation is directed by the fact that amateurs *don't* have unlimited money though they often have or can get pretty good access (a big potential plus in wide area network implementation even relative to many commercial players, in my opinion). I see cooperation and coordination issues for a shared resource like this to be more difficult by far than the technical ones.

While n6rce and I designed and presented the 10 GHz multi-megabaud link shown in 1989 Ham Radio magazine and the ARRL handbook, our recent efforts have not been in this direction.
The 10th CNC proceedings, in particular, details some of the hardware and path issues we found in trying to get a 192/384 Kbps prototype backbone here in Northern California.
The 9th proceedings details the physical basis for our approach as well as a description of a polling protocol, Hubmaster, designed to fit the physical,economic and social realities of the radio and amateur environment.

Though we are not currently passing two-directional data over it, our prototype backbone currently includes two 2000'+ hilltop sites and two valley-terminus sites running data at 128 Kbps (radios have been used on the bench at 384 Kbps but crystal availability and testing have the speed temporarily reduced) over 10 watt 904.5 MHz radios and standalone digital controlling hardware. A third hilltop is under construction. While the overall length is only 100-150 miles, the paths are all fully LOS and hopefully will have enough margin to maintain connectivity even for extreme tropospheric conditions. See the 10th proceedings for an elevation profile of the longest path with plots included for various K (refractive index) factors. Also see the proceedings for a picture of some of the hardware.

Let me know if you'd like more info or want to talk about it.

  73

Glenn Elmore n6gn

Date: 11 Feb 93 05:31:51 GMT
From: ogicse!uwm.edu!spool.mu.edu!agate!usenet.ins.cwru.edu!cleveland.Freenet.Edu!ba525@network.UCSD.EDU
Subject: Alinco DJ-580t & packet
To: packet-radio@ucsd.edu

Hi. Does anyone have any experience in connecting an Alinco DJ-580t to a tnc? I have both an AEA PK-88 and a Ramsey packet modem. Is it similar to the diagrams I have seen for ICOM and other HT's? I'd like to know what works before I try it. All information will be appreciated. Thanks, Mark
mathert@caticsuf.csufresno.edu

Date: Tue, 9 Feb 1993 20:13:33 GMT
From: dog.ee.lbl.gov!pasteur!agate!spool.mu.edu!howland.reston.ans.net!zaphod.mps.ohio-state.edu!rpi!newsserver.pixel.kodak.com!laidbak!tellab5!chinet!megabyte@network.UCSD.EDU
Subject: Ami-Pac? Amiga Packet Program?
To: packet-radio@ucsd.edu

I have seen several refeences to an Amiga packet terminal program called Ami-Pac? For those of us without FTP, where can this be obtained?
--
"It is a pity that even a single drop of this noble
 gift of God should be spilled" - J.S. Bach on wine
Mark E. Sunderlin: Technocrat in Winchester, Virginia KD4HRI
 aka Dr. Megabyte: megabyte@chinet.chi.il.us (703) 722-9330

Date: Wed, 10 Feb 1993 11:10:58 GMT
From: sun-barr!cs.utexas.edu!qt.cs.utexas.edu!yale.edu!newsserver.jvnc.net!gmd.de!Germany.EU.net!mcsun!sun4nl!star.cs.vu.nl!velschot@ames.arpa
Subject: Ami-Pac? Amiga Packet Program?
To: packet-radio@ucsd.edu

megabyte@chinet.chi.il.us (Dr. Megabyte) writes:

>I have seen several refeences to an Amiga packet terminal program called
>Ami-Pac? For those of us without FTP, where can this be obtained?

And for those WITH ftp, where can I get it?
if I'm allowed, I could send it to those without ftp...

greets!,vinny

Date: 10 Feb 93 16:22:20 GMT
From: waikato.ac.nz!aukuni.ac.nz!kcbbs!kc@decwrl.dec.com
Subject: hs-modem mailing list: where ?
To: packet-radio@ucsd.edu

folks,

Is the hs-modem list still around? What's its' address?

Reply to the group _and_ with email please.

regards,
Steve - ZL1BHD

Date: Wed, 10 Feb 1993 15:29:06 GMT
From: agate!spool.mu.edu!sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!news1.boi.hp.com!king@ames.arpa
Subject: JNOS (NOS) and the LAN
To: packet-radio@ucsd.edu

I am connecting my station in my shack to my computer in the house.
The system in the shack is running the latest verson of JNOS (1.07).
I added the line;

```
attach netrom 0x60 lan 8 1500
```
(I also added a route to sking (in the house))

to my autoexec.nos

My autoexec.bat has the line.

```
hppclan -w 0x60 7 0x300   (no printer ports)
```

It's close! But something is still not right. When I FTP files
from one system to the other, I can see pauses in the transfer of
the data. If I run everything under windows, it will haing after
some data is transfered.

I switched everything to FTP Software's Network Software 2.1 mainly by adding their ethdrv.com and protman.sys. FTP transfers work very smoothly and the transfer times seem very consistant from transfer to transfer. This is under windows.

I don't know if JNOS should be able to handle the lan or not when operating under windows. It does not seem to be operating correctly when not in windows. FTP software is using the same driver as I am so I think I have that right.

Anyway, if you know of something obvious that I am doing wrong, let me know. I will keep looking on my end. Also, I have had no luck running JNOS on one end and FTP Software on the other. All FTP connections do not work. I want to run JNOS on both ends when all is said and done.

Thanks,

Steve (KD7RO)

king@mail.boi.hp.com

Date: Wed, 10 Feb 1993 20:24:51 GMT
From: pacbell.com!sgiblab!sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!news1.boi.hp.com!king@network.UCSD.EDU
Subject: JNOS (NOS) and the LAN
To: packet-radio@ucsd.edu

Steve King (king@boi.hp.com) wrote:
: I am connecting my station in my shack to my computer in the house.
: The system in the shack is running the latest verson of JNOS (1.07).
: I added the line;
:
: attach netrom 0x60 lan 8 1500
: (I also added a route to sking (in the house))

Boy, did I blow this one!!!!!!
I wanted to say:

```
attach packet 0x60 lan 8 1500
```

I guess I was asleep this morning. ;-(On the other hand, maybe I will go home and find out that is what I did (I wish).

I hope I got the rest right.

Steve

king@mail.boi.hp.com

Date: Wed, 10 Feb 1993 15:29:06 GMT
From: swrinde!news.dell.com!natinst.com!cs.utexas.edu!qt.cs.utexas.edu!yale.edu!spool.mu.edu!sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!news1.boi.hp.com!king@network.UCSD.EDU
Subject: JNOS (NOS) and the LAN
To: packet-radio@ucsd.edu

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Thanks,

Steve (KD7RO)

king@mail.boi.hp.com

Date: Tue, 9 Feb 1993 16:14:37 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!spool.mu.edu!torn!nott!cunews!
freenet.carleton.ca!Freenet.carleton.ca!aa367@network.UCSD.EDU
Subject: LATEST HF PACKET MODE INFO NEEDED? USERS ? URGENT ?
To: packet-radio@ucsd.edu

If you are operating the latest high data rate packet mode I
would like to hear from you.
Does it work as well as expected?
What are your comments?
Which machine do you recomend?

I do not have any but suddenly there is an urgent need for
a HF PACKET link and this new mode may just do the job.
You may reply to aa367@freenet.carleton.ca
When the old mode would not..
Any information appreciated
Regards
Roger Townsend aa367@freenet.carleton.ca voicemail 613 780 2555
--

Date: 9 Feb 93 22:38:08 GMT
From: pa.dec.com!engage.pko.dec.com!nntpd.lkg.dec.com!sousa.tay.dec.com!
bobseg.enet.dec.com!segrest@decwrl.dec.com
Subject: MOCOM 70 modification experience
To: packet-radio@ucsd.edu

Greetings,

I would like to talk to anyone that has had any experience converting
(or failing to convert) a Motorola MOCOM 70 UHF transceiver for packet radio
use. I am particularly interested in any 9600 baud experience.

Any constructive comments greatly appreciated.

--
Bob Segrest

segrest@bobseg.enet.dec.com

Date: 11 Feb 93 02:17:14 GMT
From: eram!dave@midway.uchicago.edu
Subject: MOCOM 70 modification experience
To: packet-radio@ucsd.edu

If your MOCOM 70's are like ours, well, good luck...

They're as dirty as hell, due to the varactor tripler (AFTER the 2m PA).
Most models cannot be brought down to the 430-440 band (for Australia).

The only useful part on them is the nice 2m PA...

[I understand that _some_ models can be converted; I don't know which.]

--
Dave Horsfall (VK2KFU)   VK2KFU @ VK2RWI.NSW.AUS.OC
dave@esi.COM.AU   ...munnari!esi.COM.AU!dave

Date: 10 Feb 93 22:31:48 GMT
From: news-mail-gateway@ucsd.edu
Subject: NOSintro - TCP/IP over Packet Radio
To: packet-radio@ucsd.edu

My copy of "NOSintro - TCP/IP over Packet Radio, an introduction to the KA9Q Network Operating System" by Ian Wade G3NRW just arrived.

It's 350+ pages, and appears to be quite thorough. The few chapters I've had time to browse are rather readable, with good illustrations and plenty of examples.

This might be the book that finally gets packet people off their net/rom duffs and into real ham radio networking!

Well done, Ian!

ISBN 1-897649-00-2. Dowermain Ltd, publishers. Dunno the price.
     - Brian

Date: 11 Feb 1993 05:57:59 GMT
From: news.service.uci.edu!ucivax!news.claremont.edu!nntp-server.caltech.edu!

pjb@network.UCSD.EDU
Subject: Setting up packet links with hams in Cuba .
To: packet-radio@ucsd.edu

Is this legal? I know there is an embargo with Cuba, and am unsure regarding even communications with hams there.

Perhaps, over the years, this has changed. I am sure you have the best of intentions, humanitarian aid and all that good stuff.

73 de Paul KI6CQ
pjb@hss.caltech.edu

Date: 12 Feb 93 03:12:24 GMT
From: news.cerf.net!pagesat!olivea!spool.mu.edu!uwm.edu!caen!destroyer!cs.ubc.ca!mala.bc.ca!oneb!ham!emd@network.UCSD.EDU
Subject: Setting up packet links with hams in Cuba .
To: packet-radio@ucsd.edu

pjb@cco.caltech.edu (Paul J. Brewer) writes:

> Is this legal? I know there is an embargo with Cuba, and am unsure
> regarding even communications with hams there.
>
> Perhaps, over the years, this has changed. I am sure you have the best of
> intentions, humanitarian aid and all that good stuff.
>
> 73 de Paul KI6CQ
> pjb@hss.caltech.edu

It may have escaped your notice, but the poster was from Canada.
Up here, we don't care how paranoid your government is, at times.

Robert Smits
VE7EMD
Ladysmith B.C.
e-mail: emd@ham.almanac.bc.ca

It may be observed
  in a general way
that life would be
  better, distinctly,
if more of the people
  with nothing to say
were able to say it
  succinctly.   - Piet Hein

End of Packet-Radio Digest V93 #38
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